

## **REMARKS**

In the Office Action dated January 12, 2005, the Examiner provides a number of objections and rejections. Each of these issues will be separately addressed in the same order as addressed by the Office Action.

### **Drawings**

The Office Action states that Figure 6 designates "only that which is old". Figure 6 shows a retractor assembly in one position in solid lines and in a second position in dotted lines. The clamp 48 moves about the support 46, but the retractor blade 12 against the tissue 58 remains stationary since it is angularly positionable at the end of the retractor shaft 16. This feature is what the Applicant attempted to claim, but it appears that the initially provided claims were interpreted to reflect an angular positioning of a clamp like Bookwalter (6,241,659), Koros et al. (6,431,025), or Phillips (6,729,205).

If necessary, the Applicant would agree to remove Figure 6, but cannot admit that Figure 6 is prior art, especially over the cited references.

### **Claim Objections**

Claim 12 was objected to for lacking punctuation at the end of the sentence. A period has been added with the enclosed amendment.

### **Claim Rejections 35 USC § 112**

Claims 1-9 and 19 were rejected as the language "a connector connected at the end of the retractor shaft to the retractor shaft" was determined to be unclear. Claim 19 should have depended from claim 17 and the enclosed amendment addresses this typographical error. Claim 1 and dependent claims 2-9 were rejected based on the language cited above for claim

1. The Applicant was attempting to claim a connector located at the end of the retractor shaft. The connector is also connected to the retractor shaft.

The Applicant believes that this language conveys the Applicant's intent, but is more than happy to propose the slightly different wording of : "a connector connected to the retractor shaft at the end of the retractor shaft" which merely changes the order of the prepositional phrases, but is believed to convey the same meaning as originally intended by the Applicant.

#### **Claim Rejections 35 USC § 102**

Claims 1-20 were rejected as being anticipated by Bookwalter et al., U.S. Patent No. 6,241,659. Bookwalter shows a retractor having a support, illustrated as ring 16, and a clamp, or clamping mechanism 20. A retractor blade shaft 310 is shown extending through the clamp and is connected at its end to a blade portion 320. **The blade portion 320 is fixedly connected to the retractor shaft 320 at the end of the blade shaft 320.**

Bookwalter does have a sophisticated clamp that can pivot, and Phillips et al. (6,729,205) has what is believed to be an even more sophisticated clamp that can pivot and rotate. However none of the cited references show a blade portion of a retractor that is angularly positionable relative to an axis extending through the retractor shaft at the end of the retractor shaft.

The independent claims have been amended to require that connector at the end of the retractor blade be spaced from both the clamp and the support so that the structure of the clamp cannot be interpreted to give rise to the claimed features of the connector. Accordingly as affected by the enclosed amendment, claims 1-20 are believed to be allowable and allowance is respectfully requested.

**Conclusion**

As affected by the enclosed amendment, the applicant believes that the claims 1-20 are now allowable and such action is respectfully requested. No additional claims have been added and no additional independent claims have been created. Accordingly, no additional fees are believed to be due with this response.

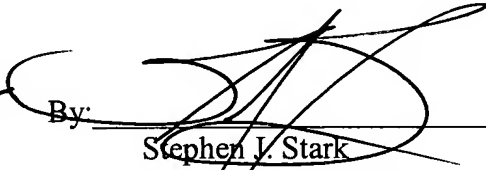
Respectfully submitted,

Date: \_\_\_\_\_

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**\*\*\* VERSION SHOWING CHANGES MADE \*\*\***

1. (Currently Amended) A retractor assembly comprising:
  - a support;
  - a clamp selectively positionable at a desired location on the support;
  - a retractor shaft connected to the clamp extending away from the clamp and support, and having an end with a shaft axis extending through the end of the retractor shaft, said end spaced by the retractor shaft from the clamp and support;
  - a connector connected to the retractor shaft at the end of the retractor shaft [to the retractor shaft]; and
  - a retractor blade connected to the connector by a stem, said stem retained to the shaft by the connector and angularly positionable relative to the shaft axis up and down intermediate a range of +/- twenty degrees relative to the shaft axis about a tilting axis.
2. (Original) The retractor assembly of claim 1 wherein the connector allows pivoting of the stem side to side about a rotation axis intermediate a range of about +/- 60 degrees relative to the shaft axis about a rotation axis..
3. (Original) The retractor assembly of claim 2 wherein the tilting axis is spaced from and perpendicular to the rotation axis.
4. (Original) The retractor assembly of claim 1 wherein the clamp grips the support when secured at the desired location on the support.

5. (Original) The retractor assembly of claim 1 wherein the support is a retractor support ring.
6. (Original) The retractor assembly of claim 1 wherein the retractor shaft is substantially linear and extends along the axis.
7. (Original) The retractor assembly of claim 1 wherein the connector further comprises a flange clevis connected to the retractor shaft which receives a pivot flange connected to the stem of the retractor blade, and said pivot flange is pivotable about a rotation axis, said rotation axis perpendicularly oriented to the shaft axis and tilting axis.
8. (Original) The retractor assembly of claim 7 further comprising a blade attachment boss and the pivot flange is connected to the blade attachment boss which connects to the stem to the retractor blade.
9. (Original) The retractor assembly of claim 8 wherein further comprising side slots in the blade attachment boss and the blade attachment boss is connected by a pin restrained by the side slots.
10. (Currently Amended) A retractor assembly comprising:  
a support;  
a clamp selectively positionable at a desired location on the support;

a retractor shaft connected to the clamp extending away from the clamp and support where the clamp is positioned on the support, said retractor shaft having an end with a shaft axis extending through the end of the retractor shaft said end spaced by the retractor shaft from the clamp and support;

a connector at the end of the retractor shaft, and

a retractor blade retained to the connector by a shoulder, said shoulder selectively positionable relative to the retractor shaft at an angle of about +/- sixty degrees relative to the shaft axis about a rotation axis.

11. (Original) The retractor assembly of claim 10 wherein the connector further comprises a slot limiting the angle of the retractor blade relative to the shaft axis.
12. (Currently Amended) The retractor assembly of claim 11 further comprising a flange clevis connected to the shaft containing the slot therein, and a pivot flange angularly positionable within the slot thereby allowing the angle of the shoulder to be selected.
13. (Original) The retractor assembly of claim 10 further comprising a blade attachment boss connected to the pivot flange allowing about +/- twenty degrees of movement about a tilting axis with said tilting axis perpendicular to the rotation axis.
14. (Original) The retractor assembly of claim 10 wherein the retractor shaft is linear and the shaft axis extends along the retractor shaft.

15. (Original) The retractor assembly of claim 10 wherein the clamp has a locked and an unlocked position when in said locked position said clamp is secured to the support, and when in said unlocked position, said clamp is moveable along the support.
16. (Original) The retractor assembly of claim 15 wherein the retractor shaft is linear.
17. (Currently Amended) A retractor assembly comprising:  
a support;  
a clamp selectively attachable to the support;  
a retractor shaft connected to the clamp extending away from the clamp and support where the clamp is positioned on the support, said retractor shaft having a shaft axis extending through at least a portion of the retractor shaft;  
a connector connected to the retractor shaft, [to the retractor shaft] the connector having a slot defined by a top, a bottom and side edges, and the connector spaced from the retractor shaft from the clamp and the support; and  
a retractor blade connected by a stem to a hub, said hub retained in said slot of the connector, said hub angularly positionable from about +/- 60 degrees relative to the shaft axis about a rotation axis.
18. (Original) The retractor assembly of claim 17 wherein the retractor shaft is linear.
19. (Currently Amended) The retractor assembly of claim 17 wherein the slot is laterally positioned to allow side to side movement of the hub in the slot about the rotation axis.

20. (Original) The retractor assembly of claim 17 wherein the slot is intersected by the shaft axis.